institutions, and vascular surgeons was reviewed and resultant conclusions derived.

Results: The incidence of stroke in seniors with >60% carotid stenosis with best medical management at the time in the Asymptomatic Carotid Arteriosclerotic Study was 11% and should be at least that with no discovery or management. Screening 18,446 seniors in the AVA program yielded 7.4% with possible >60% carotid stenosis, far more than the 1% figure used by the USPSTF in recommending against screening. Since a stroke rate of <2% is widely available with CEA, 200,000 strokes could be prevented by screening the senior Medicare population. The cost of a stroke averages $145,000 and the cost of carotid screening, evaluation, and management to prevent one stroke is $82,193 resulting in a saving of $64,807. Carotid screening of seniors could save over 13 billion dollars annually for the Medicare system.

Conclusions: Stroke remains the leading cause of disability, and the 3rd leading cause of death. Since treatment of stroke is less than ideal, emphasis on primary stroke prevention is appropriate, but strokes cannot be reduced if the silent leading immediate cause of strokes, carotid artery disease, is not recognized and managed. Management by the best means for the patient-CEA, CAS, or medically-has to be better than no recognition and no management. Carotid screening should be done. Since vascular surgeons are the most knowledgeable in carotid disease and application of the treatment options, screening nationally for carotid disease should be presented to and discussed by the SVS.

Author Disclosures: G. S. Lavenson: Nothing to disclose.

RR9.

Functional Outcome of Arteriovenous Fistula Varies with Age: Analysis of a VA Health Care System Practice

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Objectives: To assess the relationship between age and arteriovenous fistula (AVF) usability in Veteran patients.

Methods: Retrospective review of all AVFs, 2003-2010. Age was considered by group (<60, 60-75, >75) and as a continuous variable.

Results: 201 AVFs were created in 171 patients (mean age 63.7+/− 9.5; male 99%; non-white 48%; active dialysis 55%). 45% were wrist fistulas, 54% upper arm, 31% re-do. Older groups had more CAD (19% of <60, versus 51% of 60-75, versus 55% of >75; $p < 0.001$) and more CHF (12% versus 35% versus 45%; $p < 0.001$). There were no differences by age group in diabetes, hypertension, PAD, BMI, vein diameter, AVF location, re-do or dialysis catheter status. Mean follow-up was 32 months (range 6-79).

32% of AVFs were in use at 6 months. Success decreased with age: 50% in patients <60, versus 25% in 60-75, versus 21% in those >75 (log-rank test, $p = 0.007$). A multivariable Cox model identified age as the sole independent predictor of outcome (HR 0.96, 95% CI 0.93-0.99). 54% of AVFs were used eventually, more frequently in the younger group (68% versus 44% and 47%; log-rank test, $p = 0.018$). 14% of patients <60 died before the AVF was ever used, compared with 30% and 34% in the older groups. Median patient survival was 85, 53, and 26 months, respectively (log-rank test, $p= 0.002$).

Conclusions: A functional AVF is harder to achieve in older Veterans, whose median survival is limited. Prosthetic AV grafts may offer superior permanent dialysis access for many of these patients.

Author Disclosures: F. Bech: Nothing to disclose; **E. Gyang**: Nothing to disclose.

RR10.

Balloon Angioplasty versus Stent Placement in the Treatment of Venous Anastomotic Stenoses of Hemodialysis Grafts Following Surgical Thrombectomy

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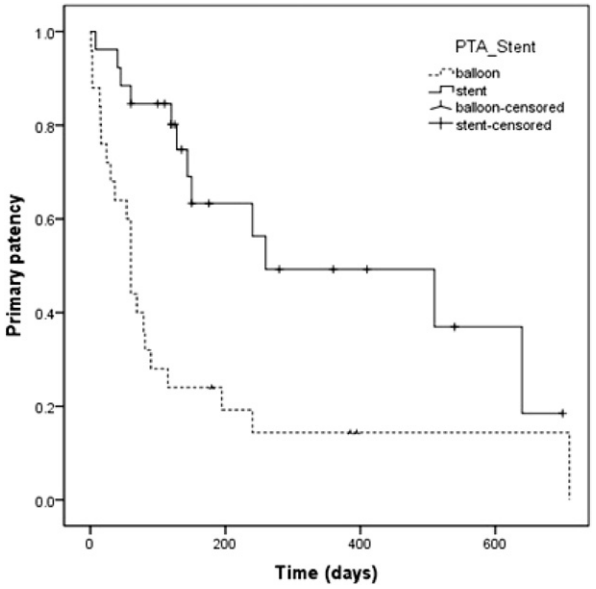
Objectives: Most of the arteriovenous hemodialysis grafts fail within eighteen months post-implantation, most commonly due to intimal hyperplasia at the venous anastomosis. The aim of our study was to compare balloon angioplasty versus bare metal stent placement in the treatment of venous anastomotic stenosis following thrombectomy of upper arm straight arteriovenous hemodialysis grafts.

Methods: Between 2/2007 and 12/2010, 61 patients with a first-time thrombosis of an upper arm straight arteriovenous hemodialysis graft were admitted to our hospital. Twenty-eight (46%) of these patients, treated before 6/2008, underwent thrombectomy plus balloon angioplasty of the venous anastomosis (group A), whereas the rest 33 (54%) patients, treated after 7/2008, underwent graft thrombectomy plus angioplasty with self-expanding nitinol stent placement (Group B). Primary patency, defined as the time period from graft thrombectomy plus angioplasty to the next graft failure, was estimated using Kaplan-Meier analysis and compared between the two groups with the log-rank test.

Results: In group A, primary patency was 32% at 3 months, 24% at 6 months and 14% at 12 months. The respective values in group B were 85%, 63% and 49% (Figure). Primary patency was significantly better in group B than in group A ($p=0.001$, log rank test). Median patency in group A was 2 months, whereas in group B it was 12 months.

Conclusions: Graft thrombectomy plus angioplasty with self-expanding nitinol stent placement provides significantly higher patency rates compared with thrombectomy plus plain balloon angioplasty of the venous anastomosis.



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RR11.

Familial AAA: High Prevalence and Decreased Cardiac Risk Factors

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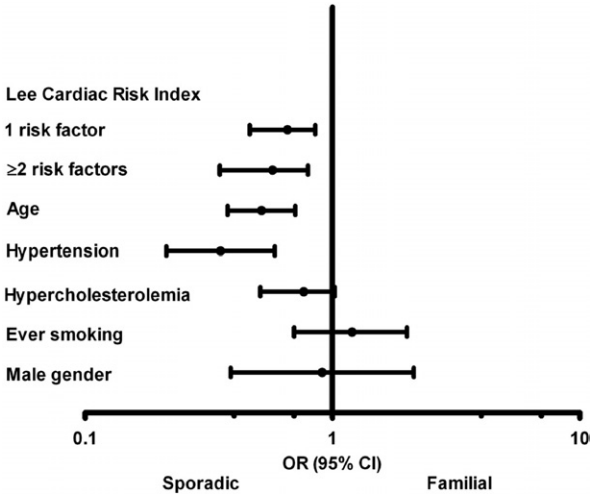
Objectives: The aim of this study was to investigate the prevalence of familial abdominal aortic aneurysms (AAA) in a tertiary medical center and to appreciate common cardiovascular risk factors for their association with sporadic and familial AAA.

Methods: Family histories were ascertained by questionnaire from 405 AAA patients (total 7955 relatives) treated between 1990-2009 (91% men; age at surgery 67,5±8.1 years). Familial AAA was defined as having one or more first or second degree family members suffering from AAA. Cardiac risk profile was assessed with the Lee's Revised Cardiac Risk Index. Univariable en multivariable analysis were performed to assess differences in atherosclerotic risk factors between sporadic and familial AAA patients.

Results: Familial AAA was reported in 106 patients (26%) and in 87 patients (82%) first-degree relatives were affected. Using multivariable analysis, familial AAA was significantly associated with lower age of the patient at diagnosis (OR 0.94; 95%CI 0.91-0.97), reduced incidence of hypertension (OR 0.35; 95%CI 0.21-0.58) and decreased cardiac risk profile (1 risk factor OR 0.60; 95%CI 0.35-1.02; ≥2 risk factors OR 0.49; 95%CI 0.24-0.99) compared to patients with sporadic AAA.

Conclusions: Our data show a high proportion of familial AAA. The familial AAA patients were diagnosed at a younger age, had a reduced incidence of hypertension and less cardiac risk factors. These findings emphasize the importance of a genetic component in the pathogenesis of AAA and suggest the need for further screening in familial AAA families.



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RR12.

Trends in the Utilization of Endovascular Therapy for Elective and Ruptured Abdominal Aortic Aneurysm Procedures across Canada: A Cohort Study

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Objectives: While randomized trials have shown improved operative mortality with Endovascular Aneurysm